

### **REMARKS**

This communication responds to the Final Office Action dated April 2, 2010. Claims 1, 11, 20, 23, 26, and 31 are amended. No claims are canceled. No claims are added. As a result, claims 1-37 remain pending in this Application. Independent claims 1, 11, 20, 23, 26, and 31 have been amended to clarify the meaning of the claim language, and not for reasons related to patentability. The amendments are fully supported in the original specification, for example, at FIG. 1 and paragraphs [0014] & [0015]. Thus, no new matter has been added.

Moreover, it is believed that the amendments would not necessitate any new searching on the part of the Examiner and that the amendments are being made for purposes of placing the present Application in condition for allowance. Therefore, it is respectfully requested that the amendments be entered for the record.

#### **The Rejection of Claims Under § 101**

Claims 20-25 were rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. This rejection is respectfully traversed.

Independent claims 20 and 23 have been amended to add “non-transitory,” as requested by the Examiner. Amended independent claims 20 and 23 each recite, in pertinent part, “[a]n article including a **non-transitory** machine-accessible medium having associated information stored therein, wherein the information.” It is therefore respectfully requested that the rejection of claims 20 and 23 and their respective dependent claims 21, 22, 24, and 25 under 35 U.S.C. § 101 be reconsidered and withdrawn.

#### **The Rejection of Claims Under § 102 or § 103**

Claims 1, 2, 7, 11, 12, 16, 20, 23, 26, 27, 29, 32 and 35-37 were rejected under 35 U.S.C. § 102(e) or § 103 as allegedly being anticipated by Ling et al. (U.S. 6,771,706, hereinafter “Ling”) or obvious in view of Ling and Hammerschmidt (U.S. 2004/0151145). Since a proper *prima facie* case of anticipation or obviousness has not been established, this rejection is respectfully traversed.

Amended independent claim 1 recites, in pertinent part, “receiving, at the transmitter from the receiver, the second number of training symbols **without requiring channel state information (CSI) feedback from the receiver.**” The undersigned respectfully submits that neither Ling nor Hammerschmidt, alone or in combination, teaches or suggests these claimed elements.

At p. 3, paragraph 5 of the Final Office Action, the Office admitted that Ling does not show the above-quoted elements of amended independent claim 1. The undersigned agrees with the admission. At p. 4, lines 1-12 of the Final Office Action, the Office asserted that Hammerschmidt discloses the above-quoted elements of amended independent claim 1. The undersigned respectfully disagrees.

Hammerschmidt discusses “an uplink (UL) transmission” that transmits “UL packets” from a given client terminal (CLT) to an access point (AP) (*see* paragraphs [0038] & [0069]) and a “downlink (DL) transmission” that transmits “subsequent DL packets” from the AP to the CLT in response to receipt of the UL packets (*see* paragraph [0050] & [0069]). *See also* Hammerschmidt at FIGS. 11, 12A & 12B and paragraphs [0070]-[0075].

Under Hammerschmidt’s approach, “the first downlink may be (a) an enhanced downlink implemented using a corresponding CSI set, e.g., similar to the enhanced downlink of FIG. 12A.” Hammerschmidt at paragraph [0080], lines 6-7. Although “a regular downlink” is used “if the CSI set is not available or has expired,” a new CSI set is created “to replace the previously stored CSI set ... [and] then used during the second [enhanced] downlink shown in FIG. 12B” that follows the regular downlink. Hammerschmidt at FIG. 12B and paragraph [0080], lines 9-18. Given the teaching that **the AP in Hammerschmidt downloads the (previous or new) CSI set to the CLT** along with the DL packets, Hammerschmidt fails to show the aforementioned elements of amended independent claim 1. That is, the undersigned is unable to find any teaching of “receiving, at the transmitter from the receiver, the second number of training symbols **without requiring channel state information (CSI) feedback from the receiver**” within the bounds of Ling or Hammerschmidt, alone or in combination.

These arguments in support of the patentability of claim 1 similarly apply to amended independent claim 11, 20, 23, 26, and 31.

Since Ling or Hammerschmidt, alone or in combination, fail to teach or suggest all the elements recited in amended independent claims 1, 11, 20, 23, 26, and 31, the undersigned respectfully submits that these claims are in condition for allowance. Therefore, it is respectfully requested that the rejection of independent claims 1, 11, 20, 23, 26, and 31 under 35 U.S.C. § 102(e) or § 103 be reconsidered and withdrawn.

Claims 2, 7, 12, 16, 27, 29, 32 and 35-37 depend from their respective independent claims 1, 11, 20, 26, and 31 and contain additional, patentable subject matter. For at least the same reasons as amended independent claims 1, 11, 20, 26, and 31, the undersigned respectfully submits that these dependent claims are also in condition for allowance. It is therefore respectfully requested that the rejection of claims 2, 7, 12, 16, 27, 29, 32, and 35-37 under 35 U.S.C. § 102(e) or § 103 also be reconsidered and withdrawn.

*The Rejection of Claims Under § 103*

Claims 3-6, 8, 9, 13-15, 17, 18, 21, 22, 24, 25, 28, 30, 33, and 34 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of Ling, Hammerschmidt and Whitehill et al. (U.S. 2002/0191573, hereinafter "Whitehill"). This rejection is respectfully traversed.

Ling and Hammerschmidt were discussed in the preceding section.

Whitehill was cited to remedy the deficiency of Ling and Hammerschmidt with respect to, for example, receiving a clear to transmit response. *See* Final Office Action, p. 15, first paragraph. However, it is respectfully noted that Whitehill does not operate to supply the elements of amended independent claims 1, 11, 20, 23, 26, and 31 that are missing from Ling and Hammerschmidt. The undersigned is unable to find any such teaching within the bounds of Ling, Hammerschmidt or Whitehill, alone or in combination.

Claims 3-6, 8, 9, 13-15, 17, 18, 21, 22, 24, 25, 28, 30, 33, and 34 depend from their respective independent claims 1, 11, 20, 23, 26, and 31 and contain additional, patentable subject matter. Since claims 1, 11, 20, 23, 26, and 31 are nonobvious, dependent claims 3-6, 8, 9, 13-15, 17, 18, 21, 22, 24, 25, 28, 30, 33, and 34 are also nonobvious, because any claim depending from a nonobvious independent claim is also nonobvious. *See* M.P.E.P. § 2143.03. Thus, for at least the same reasons as those given with respect to amended independent claims 1, 11, 20, 23, 26,

and 31, it is respectfully requested that the rejection of claims 3-6, 8, 9, 13-15, 17, 18, 21, 22, 24, 25, 28, 30, 33, and 34 under 35 U.S.C. § 103(a) also be reconsidered and withdrawn.

Claims 10 and 19 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of Ling, Hammerschmidt and Schramm (U.S. 2002/0110138). This rejection is respectfully traversed.

Ling and Hammerschmidt were discussed in the preceding section.

Schramm was cited to remedy the deficiency of Ling and Hammerschmidt with respect to transmitting a header including a length specification corresponding to the first number of training symbols. *See* Final Office Action, p. 25. Schramm does not, however, supply the elements of amended independent claims 1, 11, 20, 23, 26, and 31 that are missing from Ling and Hammerschmidt. The undersigned is unable to find any such teaching within the bounds of Ling, Hammerschmidt or Schramm, alone or in combination.

Claims 10 and 19 depend from their respective independent claims 1 and 11 and contain additional, patentable subject matter. Since claims 1 and 11 are nonobvious, dependent claims 10 and 19 are also nonobvious, because any claim depending from a nonobvious independent claim is also nonobvious. *See* M.P.E.P. 2143.03. Thus, for at least the same reasons as those given with respect to amended independent claims 1 and 11, it is respectfully requested that the rejection of claims 10 and 19 under 35 U.S.C. § 103(a) also be reconsidered and withdrawn.

**CONCLUSION**

The undersigned respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (210) 308-5677 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402--0938  
(210) 308-5677

By / Mark V. Muller /  
Mark V. Muller  
Reg. No. 37,509